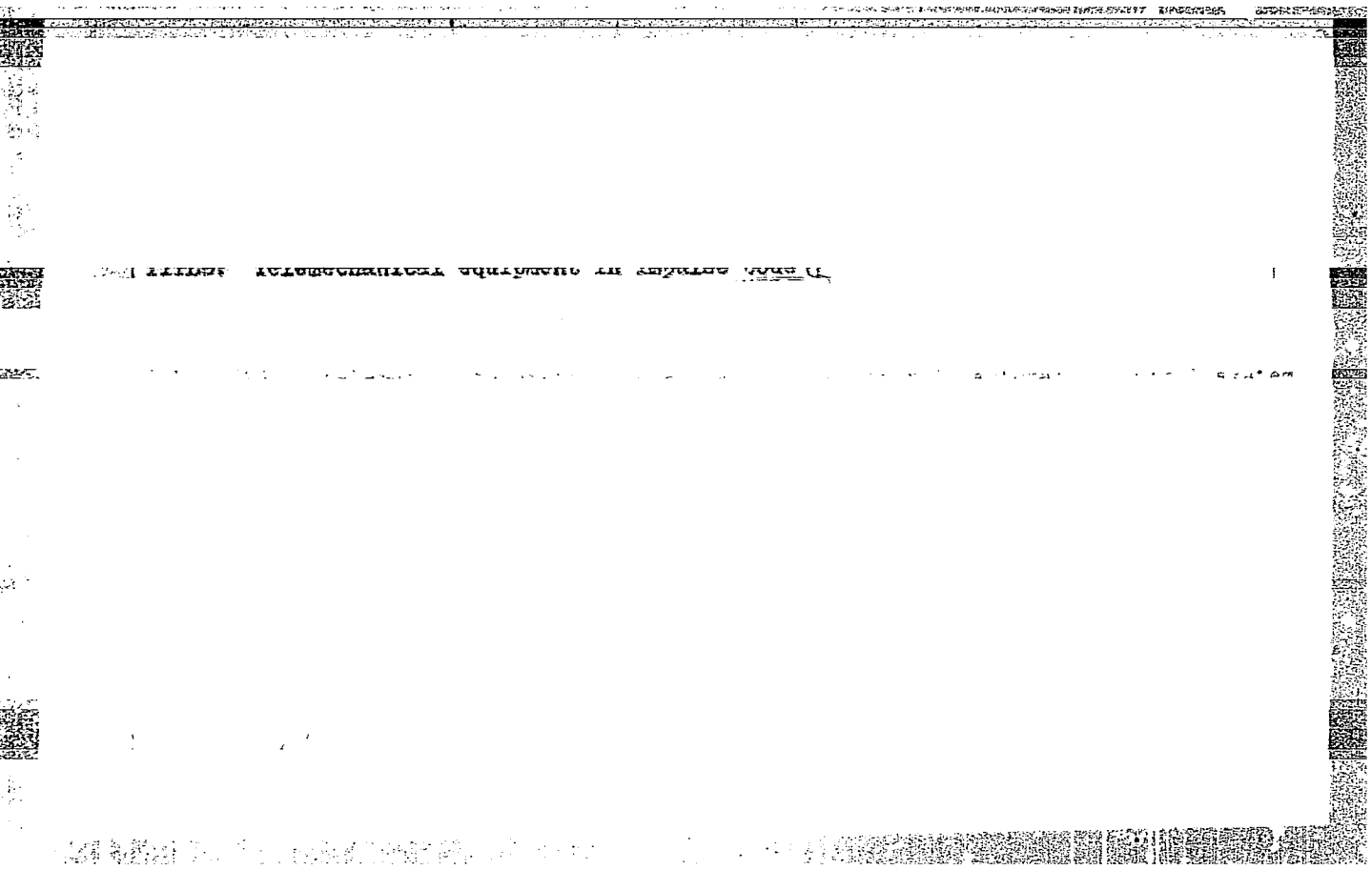
SIMBOTIN, C., ing.; TUDOROIU, V.; MIHAILESCU, E., ing.; BRANA, C.

Way of organizing new systems of industrial telemechanics.
Automatica electronica 7 no.3:106-110 My-Je '63.

1. Cercetator principal la Institutul de Cercetari Electrotehnice (for Simbotin, Tudoroiu). 2. Cercetator stagiar la Institutul de Cercetari Electrotehnice (for Mihailescu, Brana).



TUDOROIU, V.

Automation in the extraction, transportation, and distribution of methane gas. p. 104.

AUTOMATICA SI ELECTRONICA (Asociatia Stinifica a Inginerilor si techicienilor din Rominia)
Vol. 2, no. 5, Sept/Oct. 1958
Bucuresti, Rumania

Monthly list of European Accession Index (EEAI) LC Vol. 8, no. 11
November 1959
Uncl.

TUDOROIU, V.

Automation in the extraction, transportation, and distribution of methane gas. p. 104.

AUTOMATICA SI ELECTRONICA. (Asociatia Stiinfitica a Inginerilor si Tehnicienilor din Romania)
Bucuresti, Rumania
Vol. 3, no. 3, May/June 1959.

Monthly list of Eastern European Accession Index (EEAI) LC Vol. 8, No. 11
November 1959
Uncl.

TUDOROV, Iv.

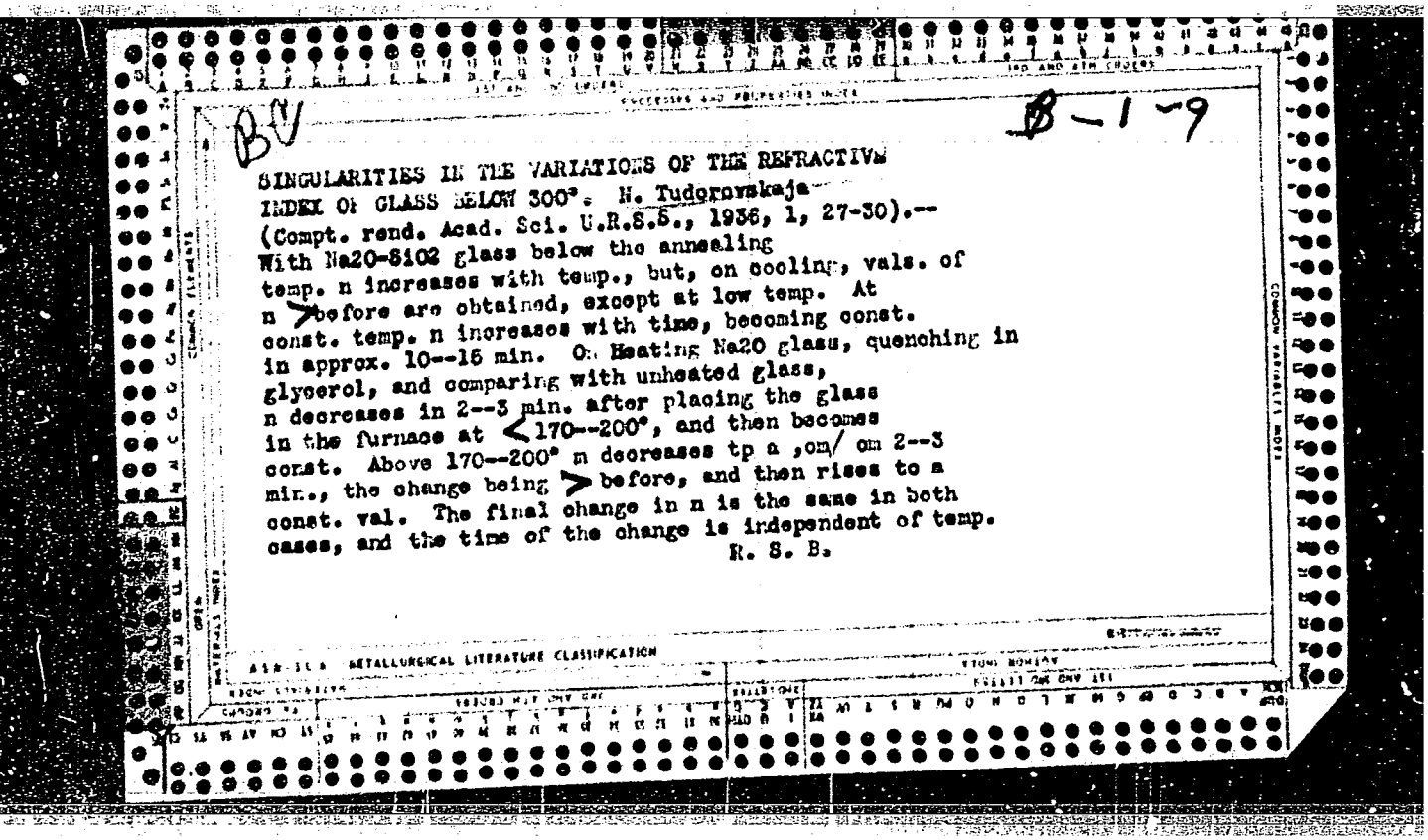
Treatment of false prognathism and of overbite with the apparatus fixed directly in the mouth. Stomatologiia, Sofia no.5:313-315 1954.

1. Iz okruzhnata stomatologicheska poliklinika, Sofiia.
(MALOCCLUSION, therapy,
appar., fixation directly in mouth)

TUDOROVSKAYA, G.L.; MARGOLIS, F.G.

Kinetics of urea decomposition in the presence of monoammonium phosphate. Trudy NIUIF no.208:3-7 '65.

Quaternary system of urea, ammonium nitrate, monoammonium phosphate at 25°C. Ibid.:7-16 (MIRA 18:11)

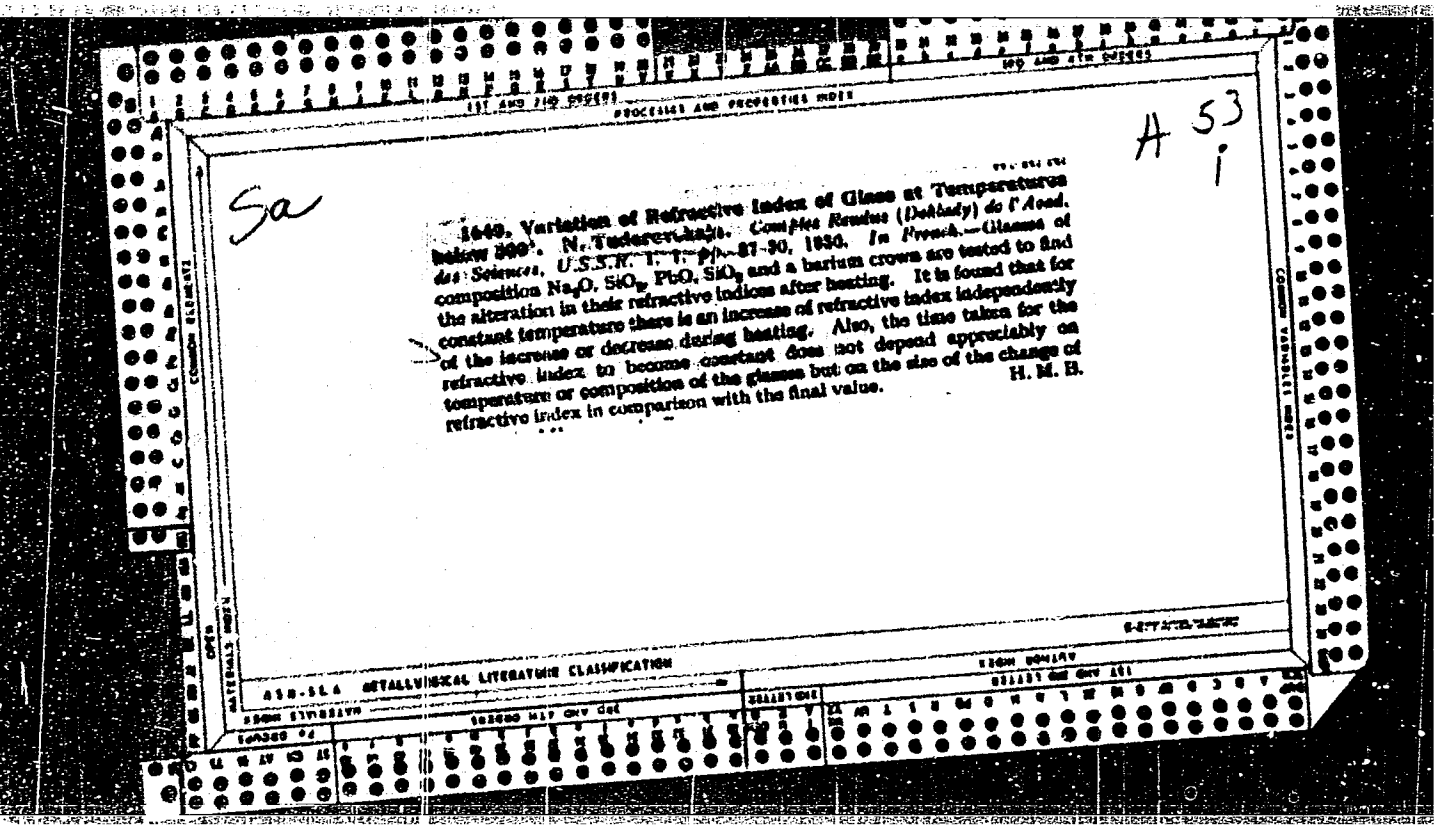


BV

B-1-9

SINGULARITIES IN THE VARIATIONS OF THE REFRACTIVE
INDEX OF GLASS BELOW 300°. N. Tudorovskaja
(Compt. rend. Acad. Sci. U.R.S.S., 1936, 1, 27-30).--
With Na_2O-SiO_2 glass below the annealing
temp. n increases with temp., but, on cooling, vals. of
n > before are obtained, except at low temp. At
const. temp. n increases with time, becoming const.
in approx. 10--15 min. On Heating Na_2O glass, quenching in
glycerol, and comparing with unheated glass,
n decreases in 2--3 min. after placing the glass
in the furnace at < 170--200°, and then becomes
const. Above 170--200° n decreases tp a ,on/ on 2--3
min., the change being > before, and then rises to a
const. val. The final change in n is the same in both
cases, and the time of the change is independent of temp.
R. S. B.

A.S.M.-I.C.I. METALLURGICAL LITERATURE CLASSIFICATION



Sa

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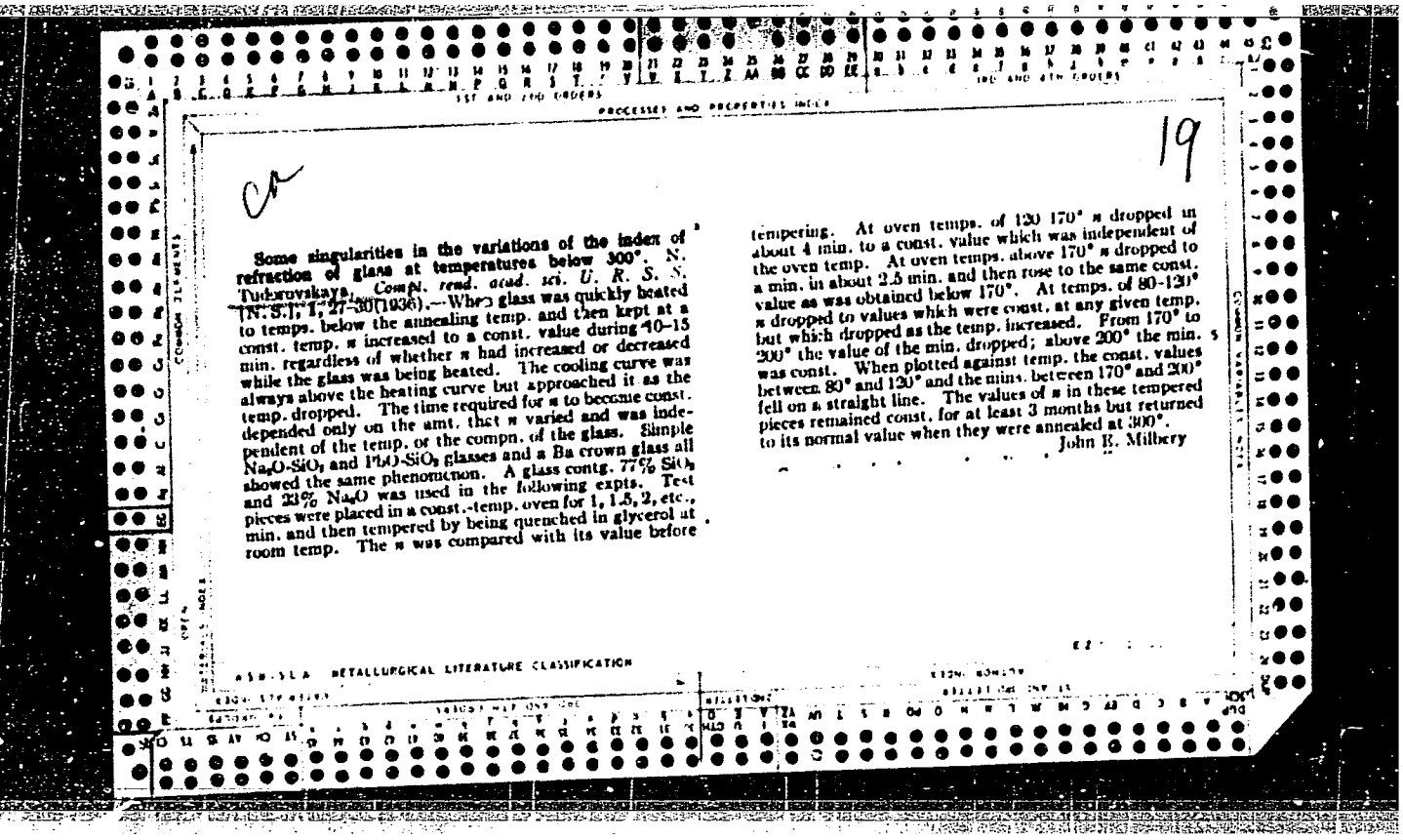
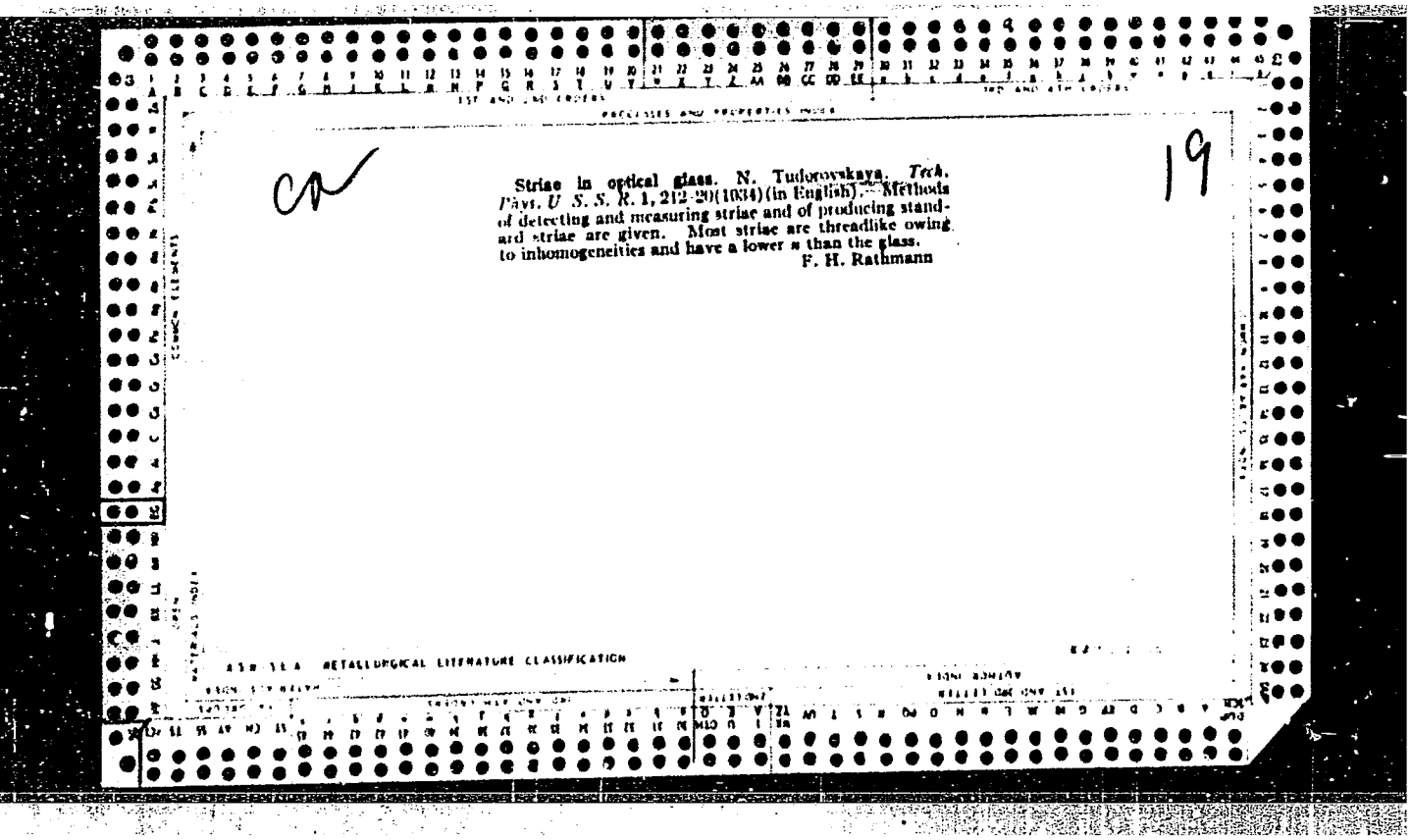
1649. Variation of Refractive Index of Glass at Temperatures below 300°. N. Tudorovskaya. *Comptes Rendus (Doklady) de l'Acad. des Sciences, U.S.S.R.* 1: 1: pp. 27-30, 1936. *In French.*—Glasses of composition Na_2O, SiO_2, PbO, SiO_2 and a barium crown are tested to find the alteration in their refractive indices after heating. It is found that for constant temperature there is an increase of refractive index independently of the increase or decrease during heating. Also, the time taken for the refractive index to become constant does not depend appreciably on temperature or composition of the glasses but on the size of the change of refractive index in comparison with the final value. H. M. B.



19

Some singularities in the variations of the index of refraction of glass at temperatures below 300°. N. Tudorovskaya. *Compt. rend. acad. sci. U. R. S. S.* [N. S.], 1, 27–30 (1936).—When glass was quickly heated to temps. below the annealing temp. and then kept at a const. temp., n increased to a const. value during 10–15 min. regardless of whether n had increased or decreased while the glass was being heated. The cooling curve was always above the heating curve but approached it as the temp. dropped. The time required for n to become const. depended only on the amt. that n varied and was independent of the temp. or the compn. of the glass. Simple Na_2O-SiO_2 and PbO-SiO_2 glasses and a Ba crown glass all showed the same phenomenon. A glass contg. 77% SiO_2 and 23% Na_2O was used in the following expts. Test pieces were placed in a const.-temp. oven for 1, 1.5, 2, etc., min. and then tempered by being quenched in glycerol at room temp. The n was compared with its value before tempering. At oven temps. of 120–170° n dropped in about 4 min. to a const. value which was independent of the oven temp. At oven temps. above 170° n dropped to a min. in about 2.5 min. and then rose to the same const. value as was obtained below 170°. At temps. of 80–120° n dropped to values which were const. at any given temp. but which dropped as the temp. increased. From 170° to 200° the value of the min. dropped; above 200° the min. was const. When plotted against temp. the const. values between 80° and 120° and the mins. between 170° and 200° fell on a straight line. The values of n in these tempered pieces remained const. for at least 3 months but returned to its normal value when they were annealed at 300°.

John E. Milberry



Striae in optical glass. N. Tudorovskaya. *Tech. Phys. U. S. S. R.* 1, 212-20(1934)(in English).—Methods of detecting and measuring striae and of producing standard striae are given. Most striae are threadlike owing to inhomogeneities and have a lower n than the glass.
F. H. Rathmann

19

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

TUDOROVSKAYA, N.A.; SHERBTYUK, A.I.

Studying the proces- of catalyzed crystallization by the method of differential thermal analysis. Stekloobr. sost. no.1:119-122 '63. (MIRA 17:10)

ALEKSEYEV, A.G.; VARGIN, V.V.; VERTSNER, V.N.; KIND, N.Ye.; KONDRAT'YEV, Yu.N.; PODUSHKO, Ye.V.; SEREBRYAKOVA, M.V.; TIKHOMIROV, G.P.; TUDOROVSKAYA, N.A.; FLORINSKAYA, V.A.; LIBERMAN, N.R., red.

[Controlled catalyzed crystallization of glasses of the lithium aluminosilicate system] Kataliziravannaia reguliruemaia kristallizatsiia stekol litievoaliumosilikatnoi sistemy. Leningrad, Khimiia. Pt.1. 1964. 119 p. (MIRA 18:4)

ACCESSION NR: AT4019300 S/0000/63/003/001/0119/0122

AUTHOR: Tudorovskaya, N. A. ; Sherstyuk, A. I.

TITLE: Study of the process of catalyzed crystallization by the method of differential thermal analysis

SOURCE: Simpozium po stekloobraznomu sostoyaniyu. Leningrad, 1962. Stekloobraznoye sostoyaniye, vy*p. 1: Katalizirovannaya kristallizatsiya stekla (Vitreous state, no. 1: Catalyzing crystallization of glass). Trudy* simpoziuma, v. 3, no. 1. Moscow, Izd-vo AN SSSR, 1963, 119-122

TOPIC TAGS: thermal analysis, glass, glass crystallization, petalite, spodumene, catalyzed crystallization, titanium dioxide, alumina silicate

ABSTRACT: The thermal effect of crystallization was investigated in glasses of the system Li_2O-Al_2O_3-SiO_2 having the composition of petalite or spodumene with admixtures of TiO_2 and other oxides in amounts less than 10% by weight. X-ray and mineralogical analysis showed that in glass having a composition close to spodumene, the first thermal effect is produced by the crystallization of the high-temperature spodumene. The presence of the second high-temperature effect shows that a second, more refractory

Card 1/2

ACCESSION NR: AT4019300

phase is also crystallized in these glasses. For the two glasses investigated (glass 13 with 5% TiO_2 and spodumene glass), thermograms were obtained at a hearing rate of 2-29 degrees/minute. The time during which the thermal effect disappears completely at a given temperature of exposure determine the rate of crystallization of the glass at this temperature. For glass 13, the effect of TiO_2 (1-11% by weight) on the thermal effect was also investigated, thermograms being plotted at a heating rate of 7 degrees/min. On the basis of the amount and character of the exothermal effects on the thermogram, the amount of each crystallized phase could be determined. Surface crystallization and overall crystallization could also be distinguished on the thermograms. The relative amount of crystallized phase was calculated from the thermograms by the method fo A. G. Vlasov and A. I. Sherstyuk. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: None

SUBMITTED: 17May63 DATE ACQ: 21Nov63 ENCL: 00

SUB CODE: MT NO REF SOV: 001 OTHER: 000

Card 2/2

TUDOROVSKAYA, N. A.

TUDOROVSKAYA, N. A.: "Structural changes in the indexes of refraction of glass at temperatures below 300 degrees Centigrade." State Order of Lenin Optical Inst imeni S. I. Vavilov. Leningrad, 1956. (Dissertation for the Degree of Candidate in Physicomathematical in Sciences).

SO: Knizhaya Letopis', No 23, 1956

SELEZNEVA, Yevgeniya Semenovna; TUDOROVSKAYA, Yelena Aleksandrovna; KLADO, T.N., otv.red.; SOLOVEYCHIK, A.A., tekhn.red.

[P.A.Molchanov; eminent Soviet aerologist] P.A.Molchanov vydaiushchiisia sovetskii aerolog. Leningrad, Gidrometeor. izd-vo, 1958. 101 p. (MIRA 12:2)
(Molchanov, Pavel Aleksandrovich, 1893-1941)
(Meteorology)

MAYOROV, S.A.; YEVTEYEV, F.Ye., prof., retsenzent; TUDOROVSKIY, A.A., kand. tekhn. nauk, red.

[Technology of the manufacture of computers] Tekhnologiia proizvodstva vychislitel'nykh mashin. Moskva, Mashinostroenie, 1965. 410 p. (MIRA 18:9)

TUDOR... ALEKSANDR ILLARIONOVICH

'764

Optics
optical instruments
illumination.

1875-1963

KLIMOV, V.P.; ROZENBERG, Ya.G.; TUDOROVSKIY, V.P., otv.red.; NOVIKOVA, Ye.S., red.; KARABILOVA, S.F., tekhn.red.

[Suggestions of efficiency experts on wire-broadcasting networks and electric communications within districts.] Ratsionalizatorskie predlozheniia po vnutriraionnoi elektrosviazi i radiofikatsii. Moskva, Gos.izd-vo lit-ry po voprosam sviazi i radio, 1960. 55 p. (MIRA 14:3)

(Wire broadcasting) (Telecommunication)

TUDORSKIY, Yu

Lozh i litsemeriye Amerikanskoy burzhuaznoy demokratii (Lies and hypocricy of American bourgeois democracy, by) V. Ivanov i Yu. Tudorskiy. Moskva, Gospolitizdat, 1951. 122 p. Cataloged from abstract. Discusses the poverty and starvation facing the American people, the American workers' lack of rights, the fascistic trend of life in the USA, etc.

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850
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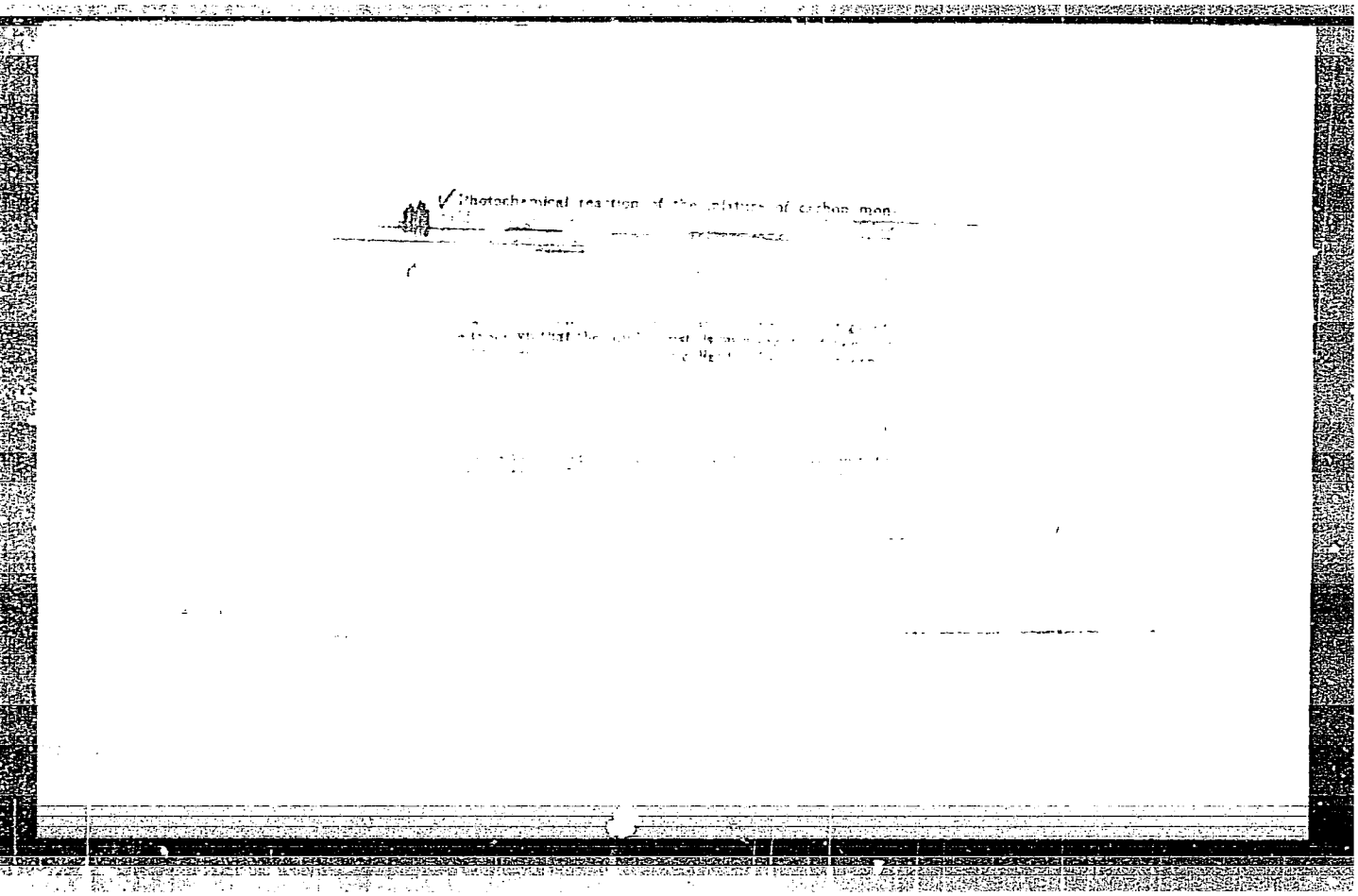

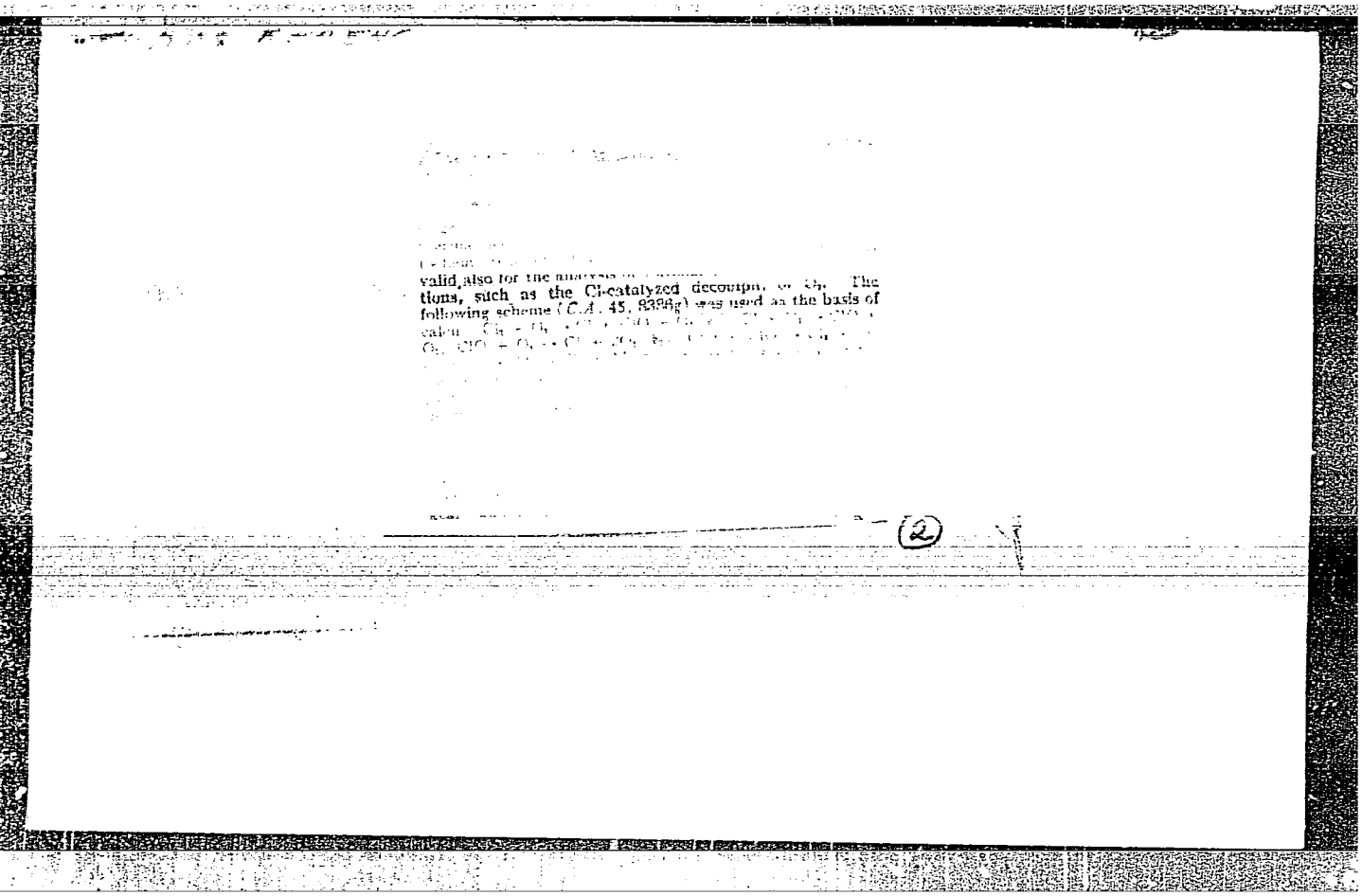

valid also for the [illegible] decompn. of [illegible]. The
tions, such as the Cl-catalyzed decompn.
following scheme (*C.A.* 45, 8398g) was used as the basis of

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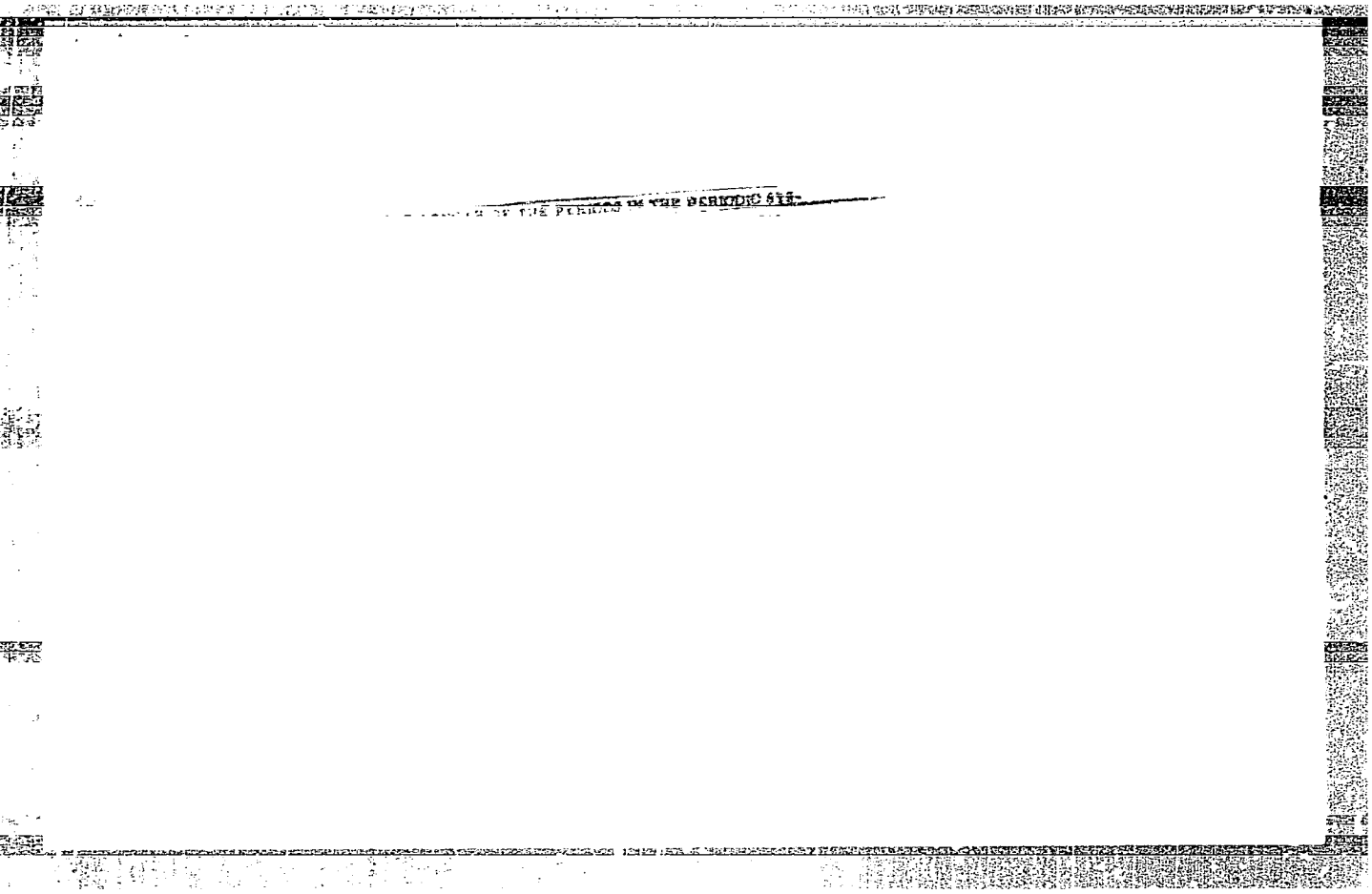


Tüdös, F., Central Chemical Research Institute, Hungarian AS Budapest

"Study of the Inhibition of the Thermal Polymerization of Styrene," a paper submitted at the International Symposium on Macromolecular Chemistry, 9-15 Sep 1957, Prague.

Distr: 4E2c(j)

Kinetics of the inhibition of the thermal polymerization of styrene. I. Kinetics of the one-step inhibition. F. Tudos and N. I. Smirnow (Hungarian Acad. Sci., Budapest). *Acta Chim. Acad. Sci. Hung.* 15, 389-99(1958); (in German).—The kinetics of the 1-step inhibition of polymerization through free radicals was investigated, and equations for the concn. of active centers established. II. Mechanism of the two-step inhibition. *Ibid.* 401-8.—The kinetics of the consecutive reactions between inhibitor, and free radicals was developed. III. Kinetics of the copolymerization of the inhibitor. *Ibid.* 409-15.—Equations were derived to investigate the copolymerization of inhibitors. The increase of the length of the inhibition period as a function of the concn. of inhibitor was not linear. IV. Thermal polymerization of styrene inhibited by quinones. F. Tudos and V. Furst. *Ibid.* 417-39.—Benzoquinone inhibited the 2-step polymerization of styrene. A semiquinoidal radical formed as an intermediate. Activation energies of some elementary reactions were detd. V. Mechanism of the effect of stable free radicals. *Ibid.* 441-7.—It was shown that 1,1-diphenyl-2-picrylhydrazyl (cf. Poirier, *et al C.A.* 47, 8671b), in addn. to inhibiting, also simultaneously initiates the polymerization of styrene. Millard Malenthal

TUDOS, F.

Distr: 4E2c(j) 7

Inhibited thermal polymerization of styrene; kinetics of copolymerization of quinones with styrene. F. Tudos (Hungarian Acad. Sci., Budapest). *J. Polymer Sci.* 30, 343-50(1958).—A plot of conversion *vs.* time shows an inflection point if concn. of inhibitor is higher than a certain value. The curve of initial polymerization velocity against concn. of inhibitor has a min. at a certain concn. Expts. with *p*-benzoquinone at 90, 105, 120, and 135° agree with these conclusions. Activation energy of the inhibition reaction is 4.3 kcal./mol., and the activation energy of copolymerization of quinone is 9.4 kcal./mol. M. H. Danzig

4
2 May
1

TUDOS, F.

SCIENCE

PERIODICALS: ~~ACTA ZOOLOGICA.~~ Vol. 64, No. 7/8 July/Aug. 1958
MAGYAR KEMIAI FOLYOIRAT

Tudos, F. Heat-transfer problems of polymerization-kinetic investigations. p. 270

Monthly list of East European Accessions (EEAI) LC, VOL. 8, No. 2, February 1959, Unclass.

TUDOS, F.

SCIENCE

PERIODICAL: MAGYAR KEMIAI FOLYOIRAT. Vol. 64, no. 7/8, July/Aug. 1958

Tudos, F. Investigation into some stabile free radicals. p. 305.

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 2, February 1959, Unclass.

TUDOS, Ferenc, a kemiai tudomanyok kandidatusa (Budapest)

Kinetics of polymerization processes. I. Kem.tud.kozl.MTA 12 no.4: 455-471 '59. (KKAI 9:4)

1. A Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete, Budapest.

(Polymers and polymerization)

TUDOS, F.

PHASE I BOOK EXPLOITATION SOV/4983

International symposium on macromolecular chemistry. Moscow, 1960.

Mezhdunarodnyy simpozium po makromolekulyarnoy khimii, SSSR, Moskva, 14-18 iyunya 1960 g.; doklady i avtoreferaty. Sektsiya II. (International Symposium on Macromolecular Chemistry Held in Moscow, June 14-18; Papers and Summaries) Section II. [Moscow, Izd-vo AN SSSR, 1960] 559 p. 5,500 copies printed.

Sponsoring Agency: The International Union of Pure and Applied Chemistry, Commission on Macromolecular Chemistry

Tech. Ed.: T.A. Prusakova.

PURPOSE: This book is intended for chemists interested in polymerization reactions and the synthesis of high-molecular compounds.

COVERAGE: This is Section II of a multivolume work containing papers on macromolecular chemistry. The papers in this volume treat mainly the kinetics of various polymerization reactions initiated by different catalysts or induced by radiation. Among the research techniques discussed are electron paramagnetic resonance spectroscopy and light-scattering interpolation. There are summaries in English, French and Russian. No personalities are mentioned. References follow each article.

45

TUDOS, Ferenc (Budapest XIV Hungaria korut 114); BEREZHNIKH, Tamara F. (Budapest XIV Hungaria korut 114); AZORI, Maria (Budapest XIV Hungaria korut 114)

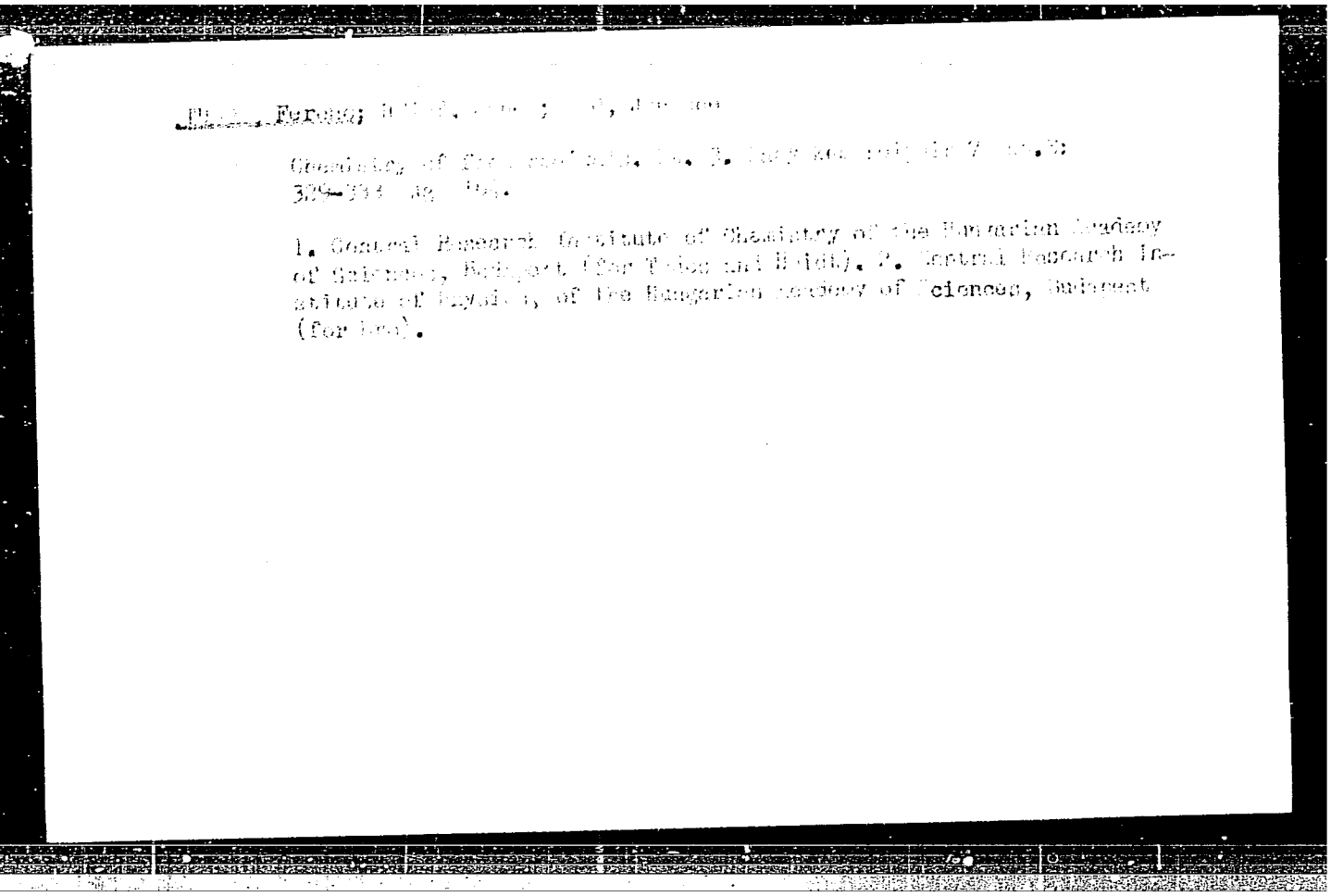
Kinetics of the inhibition of thepolymerization of styrol. I. Effect of the stable-free radicals. Acta chimica Hung 24 no.1:91-106 '60. (EEAI 10:4)

1. Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest.
(Polymers and polymerization) (Styrene) (Diphenylpicrylhydrazyl)

IRVING, Rezsone; TUDOS, Ferenc; TELEKI, Piroska

Initiated polymerization of styrol by sulfinic acid. I. Polymerization of styrol in the presence of p-toluolsulfinic acid as well as of benzoyl peroxide-p-toluolsulfinic acid system. Magy kem folyoir 66 no.10:415-422 O '60.

1. Kabel- es Muanyaggyar Kozponti Laboratorium, Budapest; Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete, Budapest; es Budapesti Muszaki Egyetem Muanyag- es Gumiipari Tanszeke.



Phys. Express; [illegible]

Quenching of [illegible]. No. 3. [illegible]
309-314 [illegible].

1. General Research Institute of Chemistry of the Hungarian Academy of Sciences, Budapest (for Tétényi and Beidl). 2. Central Research Institute of Physics, of the Hungarian Academy of Sciences, Budapest (for Ero).

FOLDESNE BEREZSNICH, Tamara; TUDOS, Ferenc

Kinetics of radical polymerization. Pt.12. Magy kem folyoir 70 no.11:500-504 N '64.

1. Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest.

KIRALY, Janos (Budapest, XIV., Hungaria korut 114); FEJES, Pal (Budapest, XIV., Hungaria korut 114); TUDOS, Ferenc (Budapest, XIV., Hungaria korut 114); AZORI, Maria (Budapest, XIV., Hungaria korut 114)

Adsorption of oxygen on free radicals of 1,1-diphenyl-2-picryl hydrazyl. Acta chimica Hung 29 no.4:409-418 '61.

1. Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest. 2. Editorial board member, "Acta Chimica Academiae Scientiarum Hungaricae" (for Tudos).

39852
S/190/62/004/008/014/016
B101/B138

5,3200

AUTHORS: Tüdös, F., Kende, I., Azori, M.

TITLE: Kinetics of inhibition of radical polymerization. IV. Effect of mono- and dinitro-benzene derivatives on the induced polymerization of styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v.4, no. 8, 1962, 1262-1270

TEXT: The influence of substituents on the inhibiting effect of nitro-aryl compounds was studied during the polymerization of styrene induced by azoisobutyric acid dinitrile, and also the dependence of chain regeneration on polar factors. Modified kinetic equations including those by L. J. Kice (J. Amer. Chem. Soc., 76, 6274, 1954) and data obtained by P. D. Bartlett, H. Kwart (J. Amer. Chem. Soc., 72, 1051, 1950; ibid., 74, 3969, 1952), D. H. McDaniel and H. C. Brown (J. Organ. Chem., 23, 420, 1958) were used to calculate the reactivity k_5/k_2, the reactivity nitro group $\frac{1}{n}k_5/k_2$, and the algebraic sum $\sum\sigma_i$ of the

Card 1/2

Hammett constants of substituents, for nitro-benzene, o- and p-nitro-toluene, p-nitro-chloro benzene, p-nitro-anisol, ethyl ester of p-nitro-benzoic acid, o-, m-, and p-dinitro-benzene, 2,4-dinitro-toluene (Table). Results: The effect of the substituent can be described satisfactorily by Hammett's equation. Electron acceptors increase relative reactivity and reduce chain propagation. The reaction of nitro compounds with polystyrene is more sensitive to the effect of polar factors than that with methyl acrylate or vinyl acetate. This is due to compensation of the effect of electron acceptor groups supporting the latter reaction, by electrostatic repulsion between the m and nitro groups. There are 3 figures and 1 table.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut khimii AN Vengrii, Budapesht
(Central Scientific Research Institute of Chemistry of the AS Hungary, Budapest)

SUBMITTED: December 28, 1961

39853

S/190/62/004/008/015/016
B101/B180

5,3832
5,3200

AUTHORS: Tüdös, F., Simandi, L.

TITLE: Kinetics of inhibition of radical polymerization. V. Effect of p-benzoquinone and its derivatives on the induced polymerization of styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 8, 1962, 1271-1281

TEXT: The polymerization of styrene induced by azoisobutyric acid dinitrile was conducted in the presence of benzoquinone, toluquinone, o-xyloquinone, p-xyloquinone, trimethyl-p-benzoquinone, methoxyquinone, or monochloro-p-benzoquinone at 50°C by methods described previously (MTA KKKI Közleményei, no. 3, 3, 1959; ibid., no. 5, 13, 1961; Acta Chim., Hung., 14, 417, 1958). The degree of conversion was determined dilatometrically. The stoichiometric coefficient μ and the relative reactivity k_5/k_2 of the inhibitors were calculated from equations derived previously (MTA KKKI, Közleményei, no. 2, 51, 1959) (Table 2). Results:

Card 1/3

There is a strictly linear dependence between log k_5/k_2 and the redox potential E^0. The data for E^0 were taken from publications by D. E. Kvalnes (J. Amer. Chem. Soc., 56, 667, 670, 1934) and W. M. Clark (Oxidation-Reduction Potentials of Organic Systems. The Williams and Wilkins Co., Baltimore, 1960, 371). The slope of the straight line is $\alpha F/RT$, where $\alpha = 1/2$. Hence, this reaction is ideally symmetrical according to O. Dimroth (Angew. Chemie, 46, 571, 1933). The stoichiometric coefficient μ is lower than the theoretical value. It decreases as the number of substituents increases, its value depending on the position of the latter. Hence, part of the radicals formed from the inhibitor are assumed to react directly with the monomer and cause partial copolymerization of quinone and the monomer. $2/\mu$ inhibitor molecules join in with the chain which is in good agreement with data obtained by J. C. Bevington et al. (J. Chem. Soc., 1955, 2822). There are 4 figures and 2 tables.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut khimii AN Vengrii, Budapesht (Central Scientific Research Institute of Chemistry of the AS Hungary, Budapest)

Kinetics of inhibition of radical ...

SUBMITTED: December 28, 1961

Table 2. Kinetic data of the inhibitors studied. Legend: (1) inhibitor; (2) benzoquinone; (3) toluquinone; (4) methoxyquinone; (5) p-xyloquinone; (6) o-xyloquinone; (7) monochloro-p-benzoquinone; (8) trimethyl-p-benzoquinone.

1 Ингибитор	μ	k_3/k_2	E^a
БХ 2	1,26	518±25	0,711
ТХ 3	1,48	266±15	0,653
МОХ 4	1,08	193±10	0,642
п-КХ 5	1,05	82±10	0,604
о-КХ 6	0,70	120±20	—
ХХ 7	1,10	720±70	0,734
ТМХ 8	0,65	25± 5	0,527

Card 3/3

S/190/62/004/009/012/014
B101/B144

5.4300

AUTHORS: Tüdős, F., Simándi, L.

TITLE: Inhibition kinetics of radical polymerization. VI. Effect of p-xyloquinone on the initiated polymerization of styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 9, 1962, 1425-1430

TEXT: The inhibiting effect of p-xyloquinone on the initiated polymerization of xylene at 40 and 60°C was studied in the same way as previously (MTA KKKI Közleményei, no. 5, 13, 29, 1961; ibid., no. 7). Results: (1) The relative reactivity k_5/k_2 is a linear function of 1/T. k_5/k_2 is 106 at 40°C and 61 at 60°C. (2) The activation energy of the inhibition is zero, the frequency factor is very low: $\log A_5 = 5.04 \pm 0.31$. (3) Hence, inhibition is a nonadiabatic and exothermic reaction with a very low transmission coefficient; an approximate calculation for p-benzoquinone gave $\Delta H \geq -10$ kcal/mole. (4) The stoichiometric coefficient, which is 1.06 at 40°C a. . 07 at 60°C, is independent of the temperature. There are 1 figure and 2 tables.

Card 1/2

Inhibition kinetics of...

S/190/62/004/009/012/014
B101/B144

ASSOCIATION: Central Scientific Research Institute of Chemistry, Hungarian AS, Budapest

SUBMITTED: December 28, 1961

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Card 2/2

5.4300

S/190/62/004/009/013/014
B101/B144

AUTHORS: Tüdős, F., Simándi, L., Azori, M.

TITLE: Inhibition kinetics of radical polymerization. VII. Effect of halogenated quinones on the initiated polymerization of styrene

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 9, 1962, 1431-1444

TEXT: Inhibition of the polymerization of styrene by 2,5-dichloro benzoquinone, 2,6-dichloro benzoquinone, trichloro benzoquinone, chloranil, bromanil, and iodanil at 50°C was studied by methods described previously (MTA KKKI Közleményei, no. 7 (V és VI); ibid. no. 5, 13, 1961). Halogenated quinones were found to be active inhibitors. The inhibition period, however, is a nonlinear function of the inhibitor concentration. A radical which causes chain regeneration is formed by halogenated quinones with the monomer at a ratio of 1:1. The formation of this "charge transfer" complex (R. S. Mulliken, J. Amer. Chem. Soc., 74, 811, 1952) increases the reactivity of the halogenated quinones owing to an increase in transmission coefficient. The stoichiometric coefficient is

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a nontrivial quantity and decreases as the number and size of substituents increase. On the basis of the implicit equation $I(z) = \text{const} - w_1 ct/4\mu$ for the dependence of the inhibitor concentration on time, which had been developed previously (J. Polymer Sci., 30, 343, 1958), the equations $t_{i,r} = (4\mu/2k_1 fc')I(z_0/x_0)$ and $t_{i,r} = ti(4x_0/c'z_0)I(z_0,x_0) \equiv t_i I^{-}(z_0/x_0)$ (without chain regeneration), where $c' = cx_0$, are derived for the inhibition period. The experimental data are in good agreement with the theoretical values. There are 6 figures and 8 tables.

ASSOCIATION: Central Scientific Research Institute of Chemistry, Hungarian AS, Budapest

SUBMITTED: December 28, 1961

SZPICIN, V.I. [Spitsin, V.I.]; TUDOS, Ferenc [translator]

Present state of chemical sciences and their long-range development in the Soviet Union. Kem tud kozl MTA 18 no.2:173-219 '62.

1. A. Szovjetunio Tudomanyos Akademiaja Fizikai Kemiai Intezete, Moscow, es Lomonoszov Egyetem, Moscow (for Spitsin). 2. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Tudos).

SZPICIN, V.I. [Spitsin, V.I.]; TUDOS, Ferenc [translator]

New data on the effect of the radioactive radiation of solid bodies, as well as of external radiation on certain heterogeneous chemical processes. Kem tud kozl MTA 18 no.2: 301-321 '62.

1. Szovjetunio Tudomanyos Akademiaja Fizikai-kemiai Intezete, Moscow, es Lomonoszov Egyetem, Moscow (for Spitsin). 2. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Tudos).

ERDEY-GRUZ, Tibor, akademikus; BRUCKNER, Gyozo, akademikus; LENGYEL, Bela; TELEGDY-KOVATS, Laszlo, a tudomanyok doktora; HARDY, Gyula, kandidatus; GERECS, Arpad, akademikus; FOLDI, Zoltan; WOLKOBER, Zoltan; TUDOS, Ferenc, kandidatus; PURMAN, Jeno; KRAUSZ, Imre, kandidatus; ERDEY, Laszlo, akademikus; SCHAY, Geza, akademikus

An account of the 1961 work of the Section of Chemical Sciences, Hungarian Academy of Sciences. Kem tud kozl 18 no.3:343-394 '62.

1. Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak titkara, es "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkesztoje (for Erdey-Gruz). 2. Akademiai levelezo tag (for Lengyel and Foldi). 3. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Bruckner, Erdey, Foldi, Gerecs, Hardy, Lengyel, Schay, Tudos).

HARDY, Gyulane; RADICS, Lajos; TUDOS, Ferenc, kandidatus

An account of the 5th International Symposium on Free Radicals.
Kem tud kozl 16 no.3:509-519 '62.

1. Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete, Budapest. 2. "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi tagja (for Tudos).

TUROS, Ferenc, a kemiai tudomanyok kandidatusa

Discussion of the kinetics of radical polymerization on the basis of the hypothesis of hot radicals. [illegible] MTA 21 no. 1s49-8' '64.

1. Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest; Editorial board member, "A Magyar Tudomanyos Akademia Kemiai Tudomanyok Osztalyanak Kozlemenyei."

33407

H/005/62/000/002/001/001
D283/D304

15.8110

AUTHORS: Iring, Rezsö and Tüdös, Ferenc

TITLE: Polymerization of styrene initiated with sulfinic acid. II. Polymerization in the presence of a system of benzoyl-peroxide-intermetallic compound of different valencies-p-toluene sulfinic acid

PERIODICAL: Magyar kémiai folyóirat, 68, no. 2, 1962, 86-92

TEXT: After a brief review of data contained in the first article of the series, the authors describe their experiments with polymerization of styrene carried out to determine the suitability of p-toluene sulfinic acid as a reducing agent in a system of benzoyl-peroxide and an intermetallic compound of different valencies. Data contained in the article have been taken from Mrs. Iring's dissertation for the degree of Candidate. The authors examined the polymerization of styrene with benzoyl-peroxide + copper acetyl acetonate + p-toluene sulfinic acid and with benzoyl-peroxide + iron acetyl acetonate + p-toluene sulfinic acid. The experiments proved

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Polymerization of styrene ...

that polymerization when initiated with the benzoyl-peroxide + copper-acetyl acetonate + p-toluene sulfinic acid does not depend on the concentration of p-toluene sulfinic acid. In case of variable p-toluene sulfinic acid concentration, the kinetic curves show the typical form of the "dead end" polymerization after a constant initial velocity, while the limit of conversion (x_{max}) is in direct ratio to the square root of the p-toluene sulfinic acid concentration. The square of the initial velocity of polymerization is also in direct ratio to the copper acetyl acetonate concentration. The experimental results also proved that while the polymerization velocity increases with an increase of catalyst concentration, the limit of the obtainable final conversion decreases at the same time. According to

$$\log(x_{max} - x) = \log x_{max} - \frac{k' i}{4.6} t \qquad (8)$$

ths value of $\log (x_{max} - x)$ decreases linearily with the time. The directional tangent of the set of curves is in direct ratio to the initial concentration of the catalyst.

$$tg \alpha = \frac{k' i}{4.6} = \frac{k_i [\text{copper acetyl acetonate}]_0}{4.6} \qquad (9)$$ which indicates that

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D283/D304

Polymerization of styrene ...

the process of initiation is bimolecular. In case of the benzoyl peroxide + iron acetyl acetonate + p-toluene sulfinic acid system the increase of polymerization velocity is noticeable which is not the case with the benzoyl-peroxide + copper acetyl acetonate + p-toluene sulfinic acid system. The polymerization velocity decreases with the increase of the iron acetyl acetonate concentration, while the molecular weight increases. The intermetallic compounds used in the experiments were supplied by the Központi kémiai kutató intézet polimerizáció kinetikai csoportja (Polymerization Kinetics Team of the Central Chemical Research Institute). There are 14 figures, 5 tables and 5 references: 2 Soviet-bloc, 1 non-Soviet-bloc and 2 unidentified. The reference to the English-language publication reads as follows: A.V.Tobolsky: J.Amer.Soc., 80, 5927, 1958. [Abstracter's note: 2 unidentified references refer to German-language publications; it was not possible to establish whether they are East or West German.]

ASSOCIATION: Kábel - és müanyaggyár, központi laboratórium (Cable and Synthetic Material Plant, Central Laboratory) (Iring); Magyar tudományos akadémia központi kémiai kutató intézete (Central Chemical Research Institute of the Hungarian Academy of Sciences) (Tüdös)

Card 3/3

L 17634-66 EWP(j) RM

ACC NR: AT6009211 SOURCE CODE: HU/2502/65/043/001/0063/0072

AUTHOR: Turcsanyi, Bela--Turchani, B.; Tudos, Ferenc--Tyudesh, F. (Doctor)

ORG: Central Research Institute for Chemistry, Hungarian Academy of Sciences, Budapest

TITLE: Organic molecular compounds. Part 2: Crystalline molecular compounds of pyrene with 1,4-benzoquinone and its substituted derivatives

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 1, 1965, 63-72

TOPIC TAGS: IR spectroscopy, electron spin resonance, crystal chemistry, molecular crystal, quinone, crystal structure, chemical stability

ABSTRACT: The crystalline molecular compounds of pyrene formed with 1,4-benzoquinone and its methyl and haloid substituted derivatives were prepared and characterized by their color, composition, and melting point. In respect to the selectivity of the formation of molecular compounds from quinones the role of some factors affecting the stability of the crystalline complex was discussed. Some data on the infrared spectroscopical and electron spin resonance investigation of crystalline quinone-pyrene molecular compounds were presented. The authors express their thanks to the coworkers at the Institute, K. Shashvari and Sh. Kholli, for preliminary information prior to publication of the results of the radiological crystallographic and IR spectroscopic results. Further thanks is extended to the Faculty of Organic Chemistry at Szeged University for

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L 17634-66

ACC NR: AT6009211 D

carrying out the analysis on molecular compounds on oxygen. Orig. art. has: 4 figures and 2 tables. [JPRS]

SUB CODE: 20, 07 / SUBM DATE: 30Jul64 / ORIG REF: 004 / OTH REF: 006
SOV REF: 001

Card FW 2/2

35812
H/005/62/000/004/001/001
D249/D302

15.8100

AUTHORS: Iring, Rezsöné, and Tüdös, Ferenc

TITLE: Polymerization of styrene, initiated by sulphinic acid. III

PERIODICAL: Magyar kémiai folyóirat, 68 no. 4, 1962, 149 - 151

TEXT: The effect of ethanol was investigated on the polymerization of styrene, initiated by the system p-toluene-sulphinic acid + benzoyl peroxide. It was found that a relatively small quantity of alcohol (3 - 5 %), which would not effect the rate of thermal or benzoyl peroxide, initiated polymerization and increased the rate of polymerization to a considerable extent. The curve indicating the rate of polymerization as a function of the concentration of alcohol passes through a maximum. This phenomenon is interpreted as due to the association of p-toluene-sulphinic acid when dissolved in alcohol. As a result of association the rate of monomolecular decomposition of p-toluene-sulphinic acid increases. Simultaneously the rate of reaction between p-toluene-sulphinic acid and benzoyl peroxide increases as well. The experimental data are presen-

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ted in tables and as kinetic curves. There are 3 figures, 2 tables and 3 references: 2 Soviet-bloc and 1non-Soviet-bloc. The reference to the English-language publication reads as follows: W.G. Wright, J. Chem. Soc., 1919, 683.

ASSOCIATION: Budapest, kabél-és műanyaggyár (Factory of Cables and Plastics, Budapest)

SUBMITTED: August 3, 1961

X

L 45346-66 EWP(j) JW/RM

ACC NR: AT6033616 SOURCE CODE: HU/2502/65/043/002/0245/0255

AUTHOR: Tudos, Ferenc--Tyudosh, F. (Doctor; Budapest); Heidt, Janos--Geidt, Y. (Budapest); Ero, J.--Ere, Y. (Budapest)

ORG: [Tudos; Heidt] Central Research Institute for Chemistry, MTA, Budapest (MTA Kozponti Kemiai Kutato Intezet); [Ero] Central Research Institute for Physics, MTA, Budapest (MTA Kozponti Fizikai Kutato Intezet)

TITLE: Chemistry of free radicals. III. Synthesis and investigation of some stable free radicals of the Banfield type

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 43, no. 2, 1965, 245-255

TOPIC TAGS: free radical, condensation reaction, IR spectrum, electron spin resonance

ABSTRACT: A number of derivatives of some Banfield-type stable free radicals were synthesized with substitutions in the aromatic ring (o-, m- and p-CH_3; m- and p-F; m- and p-Cl, m- and p-Br, and m-NO_2). According to the experimental data, only such derivatives can be prepared in satisfactory yields which do not carry electron-donor or electron-acceptor substituents of overly excessive activity. The condensation reaction is, in general, impeded by substitution in the o-position. Experiments were also carried out to elucidate the mechanism of the condensation. The infrared spectra of the prepared compounds were recorded. In addition, the electron spin resonance spectra of the free radicals were also determined. Of the latter, the esr spectrum of the original compound and the interpretation of this spectrum are published. The authors thank Doctor A. Messmer and D. Chem for the valuable assistance in recording the infrared spectra, and Mrs. G. Szilagyi, Scientific officer for performing the microanalyses. Further thanks is extended to Miss J. Kozeluha and Mr. L. Sumegi for their participation in the experimental work. Orig. art. has: 6 figures and 1 table. [Orig. art. in Eng.] [JPRS: 33,540]

SUB CODE: 07, 20 / SUBM DATE: 02Nov65 / ORIG REF: 003 / SOV REF: 001 / OTH REF: 013

Card 1/1

L 44609-66 EWP(j)/T RM

ACC NR: AT6033141 SOURCE CODE: HU/2502/65/044/004/0403/0457

AUTHOR: Tudos, F.--Tyuyesh, F.

35
24
B+1

ORG: Central Research Institute of Chemistry, MTA, Budapest (MTA Kozponti Kemiai Kutatointezet)

TITLE: Discussion of the kinetics of radical polymerization on the basis of the hypothesis of hot radicals II.

SOURCE: Academia scientiarum hungaricae. Acta chimica, v. 44, no. 4, 1965, 403-457

TOPIC TAGS: radical polymerization, polymerization kinetics

ABSTRACT: Experimental control of the hypothesis in case of inhibition: the value of the stoichiometric coefficient is independent of temperature; the effect of inert solvents; the synthesis of polymers which contain the inhibitor; dependence of the stoichiometric coefficient on the three dimensional structure of the inhibitor; dependence of the stoichiometric coefficient on other structural factors; dependence of the stoichiometric coefficient on the reactivity of the monomers. Generalization of the results. The effect of the reaction heat on the chain reactions: discussion of the rate of polymerization by postulation of the existence of hot radicals; discussion of the chain reaction by postulation of the existence of hot radicals; determination of the starting velocity with the help of the degrees of polymerization; discussion of other reactions by postulation of the existence of hot radicals; the

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role played by the reaction heat in chain reactions. The author thanks the members of the Catalysis Committe, MTA, Professor G. Schay and Professor Z. Szabo for valuable discussions, advice and comments. He also thanks his colleagues in the Polymerization Kinetics Group, Central Research Institute for Chemistry, MTA, for their devoted cooperation and the research work which furnished the data published in this paper: Mr. I. Kende (nitro and nitroso compounds), Mrs. T. F. Bereznikh (aromatic hydrocarbons and vinyl monomers), and Mrs. T. L. Simandi (quinones, liquid-phase polymerizations). The author further thanks Mr. B. Turcsanyi and Mr. J. Heidt for preparing the inhibitors for the kinetic investigations, Mr. M. Simonyi for assistance in checking the data reported in the literature, and Mr. L. Sumegi and Mrs. K. B. Zsadon for their assistance. Orig. art. has: 8 figures, 97 formulas and 18 tables.
[JPRS: 33,540]

SUB CODE: 07 / SUBM DATE: 15Sep64 / ORIG REF: 004 / SOV REF: 010
OTH REF: 080

L 47422-66 EWP(j)/T RM

ACC NR: AT6034995 SOURCE CODE: HU/0005/65/071/012/0524/0529

SIMONYI, Miklos, [illegible]DOS, Ferenc, HEIDT, Janos; Hungarian Academy of Sciences, Central Research Institute of Chemistry (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutato Intezet), Budapest.

"Kinetics of Radical Polymerization XIII. Study of Metathetic Reactions by Means of an Inhibition Method."

Budapest, Magyar Kemiai Folyoirat, Vol 71, No 12, Dec 65, pages 524-529.

TOPIC TAGS: radical polymerization, polymerization kinetics

Abstract: [Authors' English summary modified] An inhibition method was used to study the mechanism of some metathetic reactions. The reactivity of the inhibitors of this mechanism is generally slight; consequently, a new method has been developed to determine the length of the inhibition period and the reactivity of the inhibitor. The reactivity of the Banfield condensates studied showed a slight Hammett-dependency. The stoichiometric coefficients of metathetic reactions are also smaller than the theoretical ones, a fact looked upon as proof of the hot radical hypothesis. On the basis of the hypothesis, the Hammett-dependency was established for the reactivity of the intermediate radicals as well. A change of the other substituent on the nitrogen atom has a considerable influence on the kinetic parameters. Relative reactivity increases with the delocalization of the electron of the intermediate radical while a decrease in the space requirement of the substituent favors the regeneration of the hot radical. Orig. art. has: 4 figures, 15 formulas and 2 tables. [JPRS: 34,518]

SUB CODE: 07 / SUBM DATE: 20Apr65 / ORIG REF: 012 / SOV REF: 001 / OTH REF: 006

Card 1/1 vlr

0921 1506

L 46859-66 EWP(j)/T IJP(c) RM

ACC NR: AP6034676 SOURCE CODE: HU/0005/66/000/005/0231/0237 41 B

AUTHOR: Tudos, Ferenc--Tyudesh, F.; Foldesne Berezsnich, Tamara--Feldeshne-Berezhnykh, T.

ORG: Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutato Intezet)

TITLE: Kinetics of radical polymerization XVI. Condensed aromatic hydrocarbons II

SOURCE: Magyar kemiai folyoirat, no. 5, 1966, 231-237

TOPIC TAGS: radical polymerization, aromatic hydrocarbon, activation energy

ABSTRACT: [Authors' Hungarian summary] The inhibition-kinetic study of some aromatic hydrocarbons is reported which exert a retarding effect on the polymerization of vinyl acetate. The dependence of reactivity on the parameters which characterize the structure of the aromatic hydrocarbon are discussed in detail. It was demonstrated that a radical attack can take place not only at the most reactive sites of the aromatic molecule but at less reactive sites as well, with correspondingly lesser probability. This circumstance was considered in the calculation of both reactivity and the theoretical value of the stoichiometric coefficient. The activation energy of the elemental inhibition reaction was discussed and it was shown that only a small fraction of the change in reactivity can be explained with the change in activation energy, the larger portion of it is related to a

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0921 1308

L 46859-66
ACC NR: AP6034676

change in the pre-exponential factor. Therefore, the radical reactions of aromatic hydrocarbons can not be interpreted mechanically by using Polanyi's rule. Orig. art. has: 2 figures, 9 formulas, and 4 tables. [JPRS: 36,862]

SUB CODE: 07 / SUBM DATE: 17Sep65 / ORIG REF: 009 / SOV REF: 003
OTH REF: 020.

Card 2/2

L 47239-66 EWP(j)/T RM

ACC NR: AP6034303 SOURCE CODE: HU/0005/66/000/006/0239/0243

26
B

AUTHOR: Tudos, Ferenc; Ladik, Janos; Turcsanyi, Bela

ORG: Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutato Intezet)

TITLE: Kinetics of free radical polymerization XVII. Effect of charge transfer complexes on certain elemental processes of free radical polymerization

SOURCE: Magyar kemiai folyoirat, no. 6, 1966, 239-243

TOPIC TAGS: radical polymerization, polymerization kinetics, copolymerization

ABSTRACT: [Authors' English summary modified] Molecular compounds (charge transfer complexes) which are formed in some cases of radical polymerization have a considerable influence on the kinetics of the process. A theoretical study was made of the factors which determine the kinetic parameters of the reactions of radicals with other compounds which have a closed shell π electron system. Special attention was paid to the effect of the formation of molecular compounds. It was found that the increase in reactivity which is observed generally may be attributed to an increase in the resonance energy of the transition state. This can be used as a basis for the interpretation of some anomalous effects of inhibited polymerization and co-polymerization in a satisfactory manner. Orig. art. has: 3 figures and 17 formulas. [JPRS: 36,862]

SUB CODE: 07 / SUBM DATE: 19Jun65 / ORIG REF: 006 / SOV REF: 001
OTH REF: 008

Card 1/1 ga

0952 0034

L 38647-66 EWP(j)/T RM

ACC NR: AP6027656 SOURCE CODE: HU/0005/66/000/004/0181/0186

AUTHOR: Foldesno, Berezsnich, Tamara--Feldeshne-Berezhnikh, T.; Tudos, Ferenc--Tyudesh, F.

ORG: Central Research Institute for Chemistry, MTA, Budapest (MTA Kozponti Kemiai Kutato Intezete)

TITLE: Kinetics of radical polymerization. Part 15: Investigation of condensed aromatic hydrocarbons. Section 1

SOURCE: Magyar kemiai folyoirat, no. 4, 1966, 181-186

TOPIC TAGS: polymerization kinetics, radical polymerization, aromatic hydrocarbon, vinyl compound, acetate, stoichiometry

ABSTRACT: The inhibitory effects of perylene, 1,2,4,5-dibenzopyrene, 3,4-benzotetraphene, 1,2,3,4-dibenzopyrene, anthanthrene, 3,4-benzopyrene, 1,2-benzoanthracene, anthracene, tetracene, and 9-phenylanthracene in the radical polymerization of vinyl acetate were investigated at various temperatures. The effects of temperature were not very significant. The actual values for the stoichiometric coefficients were lower for all inhibitors than those calcutated theoretically. The stoichiometric anomalies were interpreted in terms of hot-radical hypothesis. The authors thank J. Heidt and M. Vari for carrying out the experiments. Orig. art. has: 1 figure and 5 tables.

[JPRS]

SUB CODE: 07 / SUBM DATE: 17Sep65 / ORIG REF: 007 / SOV REF: 006 / OTH REF: 007

Card 1/1

0917 1153

L 47238-66 EWP(j)/T RM

ACC NR: AP6034304 SOURCE CODE: HU/0005/66/000/006/0244/0248

AUTHOR: Simandi, Laszlone--Shimandine, L.; Tudos, Ferenc--Tyudesh, F.; Turcsanyi, Bela--Turchani, B.

ORG: Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest (Magyar Tudomanyos Akademia, Kozponti Kemiai Kutato Intezet) 28 B

TITLE: Kinetics of free radical polymerization XVIII. Inhibition of free radical polymerization with quinone

SOURCE: Magyar kemiai folyoirat, no. 6, 1966, 244-248

TOPIC TAGS: radical polymerization, polymerization kinetics, quinone, polymerization inhibition

ABSTRACT: [Authors' Hungarian summary] The inhibitory effect of multiple-ring quinones on the polymerization of styrol was examined. In addition to the member which responds to changes in the redox potential, the logarithm of relative reactivity of quinones also contains a member corresponding to the change in resonance energy which accompanies the transition from quinoidal to benzoidal structure. The experimental value of the stoichiometric coefficient is, in general, considerably lower than the theoretical one. This experience can be interpreted by means of the hot radical hypothesis.

The authors thank Zsadon Belane and Aitner Jozsefne for their participation in the research work. Orig. art. has: 2 figures and 2 tables. [JPRS: 36,862]

SUB CODE: 07 / SUBM DATE: 18Sep65 / ORIG REF: 005 / SOV REF: 001 / OTH REF: 021

Card 1/1 gd

0921 0025

L 01993-67 EWT(m)/EWP(j)/T IJP(c) WW/RM

ACC NR: AM6023688 Monograph UR/

Tudos, Ferenc

An examination of the kinetics of radical polymerization based on the hypothesis of hot radicals; a survey (Rassmotreniye kinetiki radikal'noy polimerizatsii na osnove gipotezy goryachikh radikalov; obzor) Moscow, Izd-vo "Mir", 66. 0147 p. illus., biblio. Number of copies printed not given.

TOPIC TAGS: chain polymer, polymerization, radical polymerization, heat of polymerization, polymerization kinetics

PURPOSE AND COVERAGE: This book is based on the work of a Hungarian scientist, Ferenc Tudos, reported on at the Kinetic Seminar of the Institute of Chemical Physics AN SSSR. The work touches upon an extremely interesting and unresolved problem pertaining to the role played by the hot particles in kinetics. Based on the hypothesis of hot particles, it extends a large experimental material in the realm of radical polymerization. The basic premises of this work are given in the abstract presented at the meeting of the Committee on Catalysis, Hungarian Academy of Sciences, 29 May 1961. Separate parts of this communication were reported at the following conferences: Meeting on the Chemistry of Plastics (Budapest, May 1961); The Chemical Conference (Debrecen, October 1961); Conference on the Chemistry of Plastics (Smolyan, September 1962); the Chemical Conference (Seged, September 1963). This book is intended for scientists interested in the physical chemistry of polymers.

Card 1/2 UDC: 541.0/.1

L 01995-67

ACC NR: AM6023688

TABLE OF CONTENTS [abridged]:

SUB CODE: 07, 11/ SUBM DATE: 29Dec65/ ORIG REF: 019/ SOV REF: 012/ OTH REF: 175

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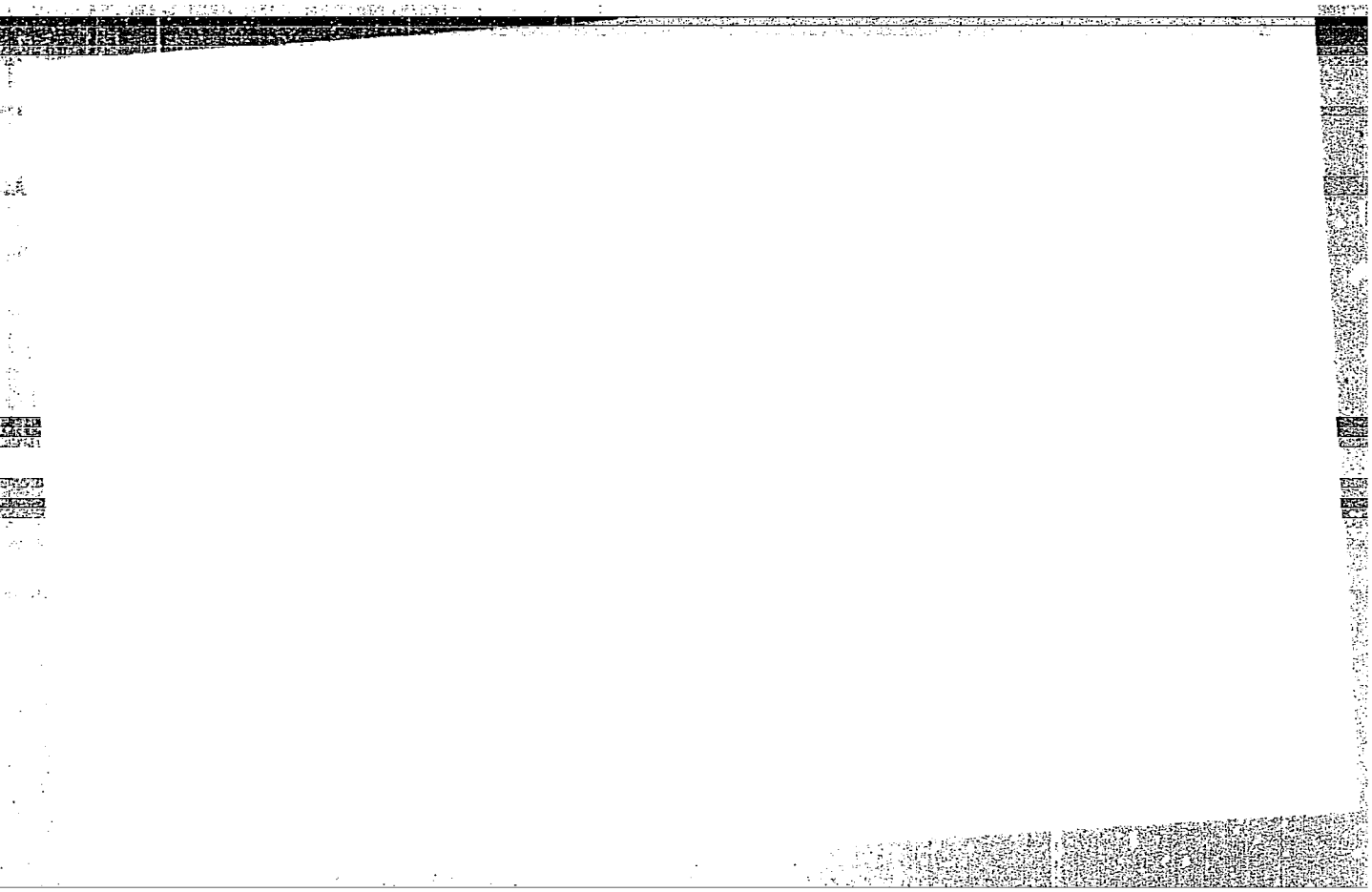
[redacted] of radical polymer-
ization by tetracene

[redacted] pendence of the relative reactivity it was established that the elementary



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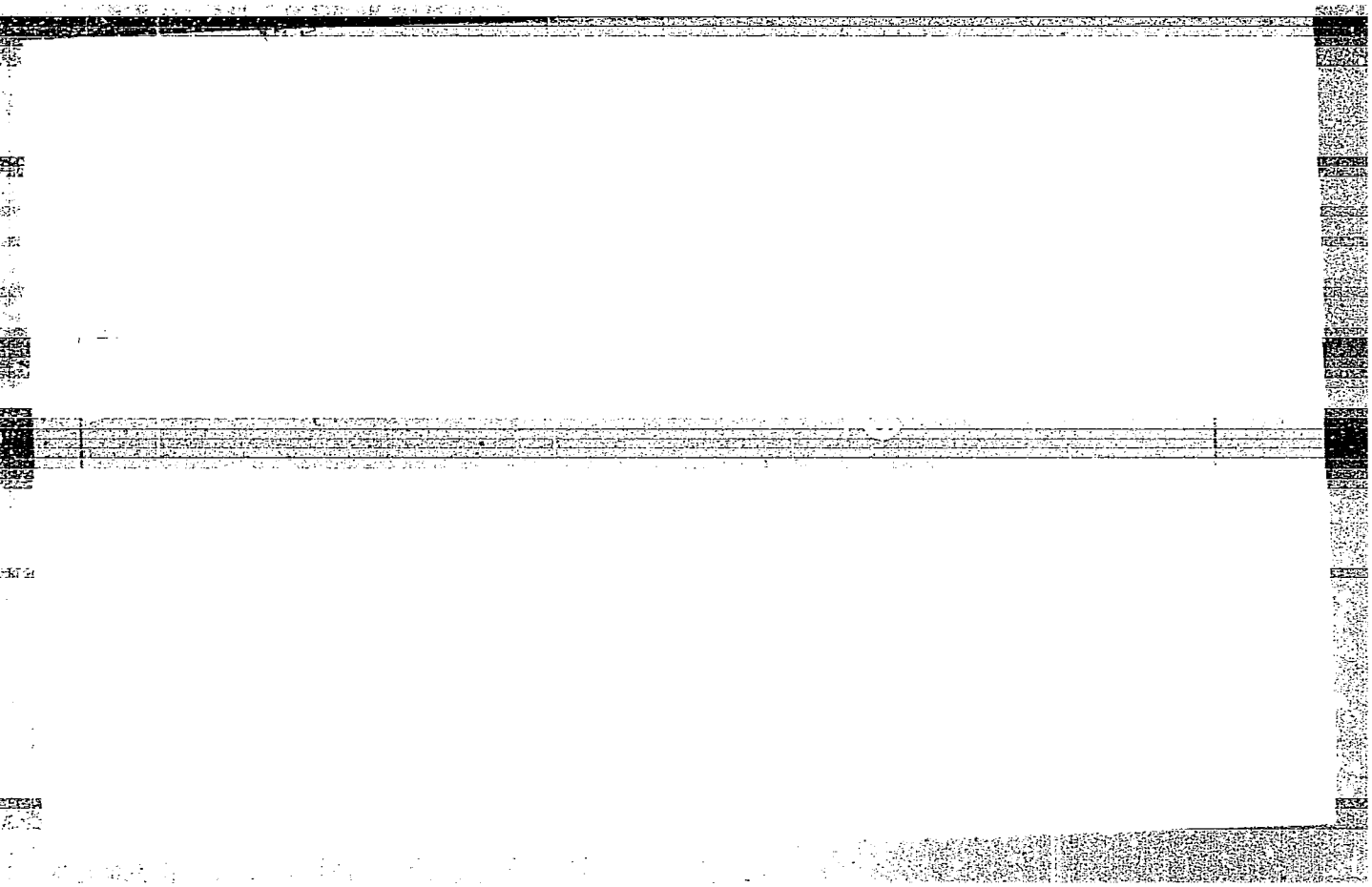

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757410002-4"

TURCSANYI, Bela; TUDOS, Ferenc

Organic molecular compounds. Pt.2. Magy kem folyoir 71 no.1:39-43 Ja '65.

1. Central Research Institute of Chemistry of the Hungarian Academy of Sciences, Budapest.

BEREZHNYKH-FEL'DESH, T.A. [Berezsnich-Földes, T.A.]; TYUDESH, F. [Tüdös, F.]

Initiated polymerization of vinyl acetate. Part 1. Vysokom.soed. 6 no.8:1522-1528 Ag '64. (MIRA 17:10)

Initiated polymerization of vinyl acetate. Part 2. Ibid.:1529-1533

1. TSentral'nyy nauchno-issledovatel'skiy institut khimii Akademii nauk Vengrii, Budapesht.

FOLDESNE BEREZSNICH, Tamara, kandidatus; TUDOS, Ferenc

Kinetics of radical polymerization. Pt.9. Magy kem folyoir 70 no.5:201-207 My '64.

1. Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest.

TUDOS, Ferenc

Kinetics of radical polymerization.Pt.10. Magy kem folyoir 70 no.5:207-214 My '64.

1. Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest.

TUDOS, Ferenc, a kemiai tudomanyok kandidatusa

Kinetic analysis of radical polymerization of the ground of the hypothesis of hot radicals.Pt.2. Kem tud kozl MTA 21 no.2:191-240 '64.

1. Central Research Institute of Chemistry, Hungarian Academy of Sciences, Budapest.

BICZO, Geza; LADIK, Janos; TUDOS, Ferenc; BEREZSNICH, Tamara

Calculating the atomic localization energy of polycondensed hydrocarbons. Magy kem folyoir 70 no. 1: 17-19 Ja '64.

1. Magyar Tudomanyos Akademia Kozponti Kemiai Kutato Intezete, Budapest.

BICZO, G.; LADIK, J.; TUDOS, F.; BEREZSNICH, T.A.

Calculation of some atomic localization energies of various polycyclic hydrocarbons. Acta phys Hung 16 no.2:173-180 '63.

1. Central Research Institute for Chemistry of the Hungarian Academy of Sciences, Budapest.

TUDOS, F.

IRING, M. [Iring, Margit] (Budapest, XI., Feherv[redacted] TYUDYESH, F.
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SURNAME, Given Names

Country: Rumania

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Affiliation: -not given-

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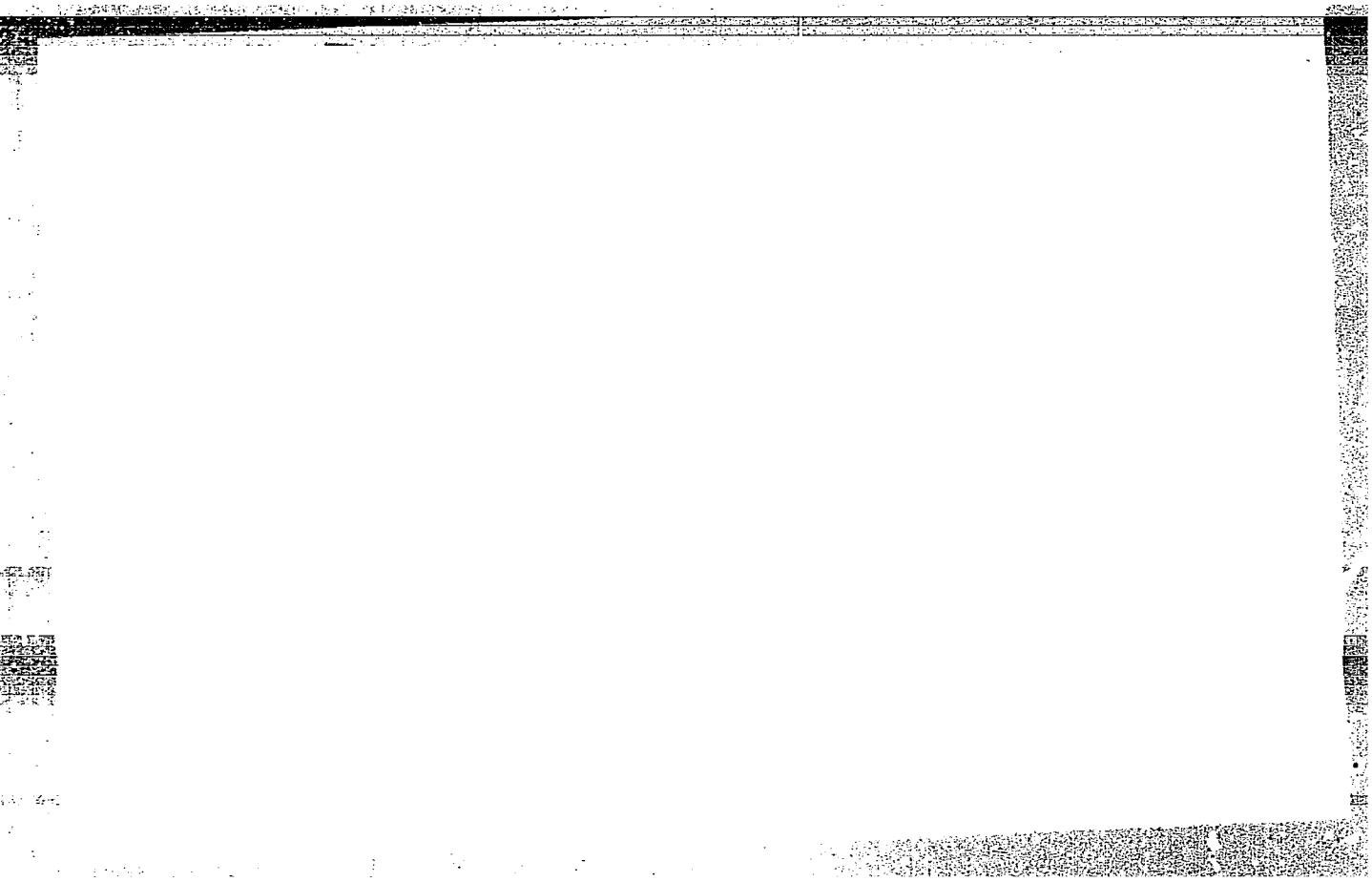

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